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Two new combinations in the moss species *Pottia starkeana* are made here. A key to infraspecific taxa within this species is also included.

These combinations are the result of my research on the taxonomy of the 'Conostegiae', a group of *Pottia* species characterised by having erostate opercula. This research project, financed by an S.R.C. studentship, was carried out in the Botany Dept of Oxford University, and the findings were submitted as a D. Phil. thesis.

***Pottia starkeana* (Hedw.) C. Müll., Synops. Musc. Frond. 1:547 (1849).**

subsp. *minutula* (Schleicher ex Schwägr.) Chamberlain, comb. et stat. nov.

Syn.: *Gymnostomum minutulum* Schleicher ex Schwägr., Sp. Musc. Suppl.

1(1):25 (1811).

G. davallianum Sm. in Ann. Bot. 1:577 (1805)?

Pottia minutula (Schleicher ex Schwägr.) Fürnr. in Flora 12(2):25 (1829).

Tortula starkei Lindb. var. *davallii* Lindb., Musci Scand. (1879).

P. rufescens (Schultz) Fürnr. ex Warnst. var. *angustifolia* Warnst. in Hedwigia 58:137 (1917), nom. illegit., quoad spec. excl. syn.

P. davalliana (Sm.) C. Jens., Danmarks Mooser 2:348 (1923).

subsp. *conica* (Schleicher ex Schwägr.) Chamberlain, comb. et stat. nov.

Syn.: *Gymnostomum conicum* Schleicher ex Schwägr., Spec. Musc. Suppl.

1(1):25 (1811).

Pottia conica (Schleicher ex Schwägr.) Fürnr. in Flora 12(2):9 (1829).

P. minutula (Schleicher ex Schwägr.) Fürnr. var. *conica* Schimper, Bryol. Eur. 18-20: 8 (1843).

P. macowaniana C. Müll. in Hedwigia 38(1):98 (1899).

P. arabica C. Müll., Gen. Musc. Frond. 389 (1901), nomen nudum.

P. algiriensis Warnst. in Hedwigia 57:83, f. 18 (1915).

P. salina Warnst. in Hedwigia 57:83, f. 19 (1915).

P. microphylla Warnst. in Hedwigia 58:141, f. 57 (1917).

P. rufescens Schultz var. *conica* (Schleicher ex Schwägr.) Warnst. in Hedwigia 58:137 (1917).

P. verrucosa Warnst. ex Rehn in Hedwigia 58:140 (1917).

P. texana Wareham in Grout, Moss Flora of N America 1:201 (1936).

P. mutica Vent. var. *salina* (Warnst.) Podp., Consp. 231 (1954).

P. zealandioides Dixon & Sainsb. in Trans. Roy. Soc. New Zeal. 75(2):169-186 (1945).

As I have been unable to locate the type of *Gymnostomum davallianum*, and since the type description is very poor, some doubt remains as to the

application of the name. I have therefore preferred to typify this subspecies with reference to *G. minutulum* Schleicher ex Schwägr. of which I have seen authentic material (collected by Schultz in Switzerland in 1814).

Pottia rufescens Schultz var. *angustifolia* Warnst. is a superfluous name since Warnstorf cites *P. minutula* Schimper var. *rufescens* (Schultz) Schimper as a synonym. The latter is a combination based on *G. rufescens*, the basionym for *P. rufescens* (Schultz) C. Müll. var. *rufescens*. Therefore var. *angustifolia* is indirectly typified by the same type as is var. *rufescens*. Quite apart from this Warnstorf has probably misinterpreted *G. rufescens* Schultz; the type description clearly describes it as having a rostrate operculum, which would exclude it altogether from *P. starkeana*.

Key to subspecies and varieties of Pottia starkeana

1. Spores with a regular or tuberculate outline, without projections
subsp. *starkeana*
 2. Peristome 60-190 μ , with acute, well-developed teeth
var. *starkeana*
 2. Peristome rudimentary or absent, if exceeding 60 μ then with fused or truncate teeth
var. *brachyodus* C. Müll.
 1. Spores regular in outline, with projections at least 1 μ long
 3. Capsule widest at the mouth; leaves narrowly lanceolate with long-excurrent nerves
subsp. *minutula* (Schleicher ex Schwägr.) Chamberlain
 3. Capsule widest near the middle; leaves narrowly lanceolate to ovate with muticous to long-excurrent nerves
subsp. *conica* (Schleicher ex Schwägr.) Chamberlain